

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10|570,661
Source: TFWP
Date Processed by STIC: 2/1/07

ENTERED

DATE: 02/01/2007

TIME: 12:05:35

Output Set: N:\CRF4\02012007\J570661.raw

OF

64 165 170 175

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/570,661

DATE: 02/01/2007

TIME: 12:05:35

Input Set : A:\PTO.SS.txt

Output Set: N:\CRF4\02012007\J570661.raw

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66 Gly Gly Tyr Leu Lys Asp Ile Lys Gly Phe Asp Ser Glu Phe Phe Ala
67          180          185          190
69 Val Ala Lys Thr Glu Ala Asp Asn Ile Asp Pro Gln Gln Arg Met Ala
70          195          200          205
72 Leu Glu Leu Thr Trp Glu Ala Leu Glu His Ala Arg Ile Pro Ala Ser
73          210          215          220
75 Ser Leu Arg Gly Gln Ala Val Gly Val Tyr Ile Gly Ser Ser Thr Asn
76 225          230          235          240
78 Asp Tyr Ser Phe Leu Ala Val Ser Asp Pro Thr Val Ala His Pro Tyr
79          245          250          255
81 Ala Ile Thr Gly Thr Ser Ser Ser Ile Ile Ala Asn Arg Val Ser Tyr
82          260          265          270
84 Phe Tyr Asp Phe His Gly Pro Ser Val Thr Ile Asp Thr Ala Cys Ser
85          275          280          285
87 Ser Ser Leu Val Ala Ile His Gln Gly Val Gln Ala Leu Arg Asn Gly
88          290          295          300
90 Glu Ala Asp Val Val Val Ala Gly Gly Val Asn Ala Leu Ile Thr Pro
91 305          310          315          320
93 Met Val Thr Leu Gly Phe Asp Glu Ile Gly Ala Val Leu Ala Pro Asp
94          325          330          335
96 Gly Arg Ile Lys Ser Phe Ser Ala Asp Ala Asp Gly Tyr Thr Arg Ser
97          340          345          350
99 Glu Gly Gly Gly Met Leu Val Leu Lys Arg Val Asp Asp Ala Arg Arg
100          355          360          365
102 Asp Gly Asp Ala Ile Leu Ala Val Ile Ala Gly Ser Ala Val Asn His
103          370          375          380
105 Asp Gly Arg Ser Asn Gly Leu Ile Ala Pro Asn Gln Asp Ala Gln Ala
106 385          390          395          400
108 Asp Val Leu Arg Arg Ala Tyr Lys Asp Ala Gly Ile Asp Pro Arg Thr
109          405          410          415
111 Val Asp Tyr Ile Glu Ala His Gly Thr Gly Thr Ile Leu Gly Asp Pro
112          420          425          430
114 Ile Glu Ala Glu Ala Leu Gly Arg Val Val Gly Arg Gly Arg Pro Ala
115          435          440          445
117 Asp Arg Pro Ala Leu Leu Gly Ala Val Lys Thr Asn Val Gly His Leu
118          450          455          460
120 Glu Ser Ala Ala Gly Ala Ala Ser Met Ala Lys Val Val Leu Ala Leu
121 465          470          475          480
123 Gln His Asp Lys Leu Pro Pro Ser Ile Asn Phe Ala Gly Pro Ser Pro
124          485          490          495
125 Tyr Ile Asp Phe Asp Ala Met Arg Leu Lys Met Ile Thr Thr Pro Thr
126          500          505          510
128 Asp Trp Pro Arg Tyr Gly Gly Tyr Ala Leu Ala Gly Val Ser Ser Phe
129          515          520          525
131 Gly Phe Gly Gly Ala Asn Ala His Val Val Val Arg Glu Val Leu Pro
132          530          535          540
134 Arg Asp Val Val Glu Lys Glu Pro Glu Pro Glu Pro Glu Pro Lys Ala
135 545          550          555          560
137 Ala Ala Glu Pro Ala Glu Ala Pro Thr Leu Ala Gly His Ala Leu Arg

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138          565          570          575
140 Phe Asp Glu Phe Gly Asn Ile Ile Thr Asp Ser Ala Val Ala Glu Glu
141          580          585          590
143 Pro Glu Pro Glu Leu Pro Gly Val Thr Glu Glu Ala Leu Arg Leu Lys
144          595          600          605
146 Glu Ala Ala Leu Glu Glu Leu Ala Ala Gln Glu Val Thr Ala Pro Leu
147          610          615          620
149 Val Pro Leu Ala Val Ser Ala Phe Leu Thr Ser Arg Lys Lys Ala Ala
150 625          630          635          640
152 Ala Ala Glu Leu Ala Asp Trp Met Gln Ser Pro Glu Gly Gln Ala Ser
153          645          650          655
155 Ser Leu Glu Ser Ile Gly Arg Ser Leu Ser Arg Arg Asn His Gly Arg
156          660          665          670
158 Ser Arg Ala Val Val Leu Ala His Asp His Asp Glu Ala Ile Lys Gly
159          675          680          685
161 Leu Arg Ala Val Ala Ala Gly Lys Gln Ala Pro Asn Val Phe Ser Val
162          690          695          700
164 Asp Gly Pro Val Thr Thr Gly Pro Val Trp Val Leu Ala Gly Phe Gly
165 705          710          715          720
167 Ala Gln His Arg Lys Met Gly Lys Ser Leu Tyr Leu Arg Asn Glu Val
168          725          730          735
170 Phe Ala Ala Trp Ile Glu Lys Val Asp Ala Leu Val Gln Asp Glu Leu
171          740          745          750
173 Gly Tyr Ser Val Leu Glu Leu Ile Leu Asp Asp Ala Gln Asp Tyr Gly
174          755          760          765
176 Ile Glu Thr Thr Gln Val Thr Ile Phe Ala Ile Gln Ile Ala Leu Gly
177          770          775          780
179 Glu Leu Leu Arg His His Gly Ala Lys Pro Ala Ala Val Ile Gly Gln
180 785          790          795          800
181 Ser Leu Gly Glu Ala Ala Ser Ala Tyr Phe Ala Gly Gly Leu Ser Leu
182          805          810          815
184 Arg Asp Ala Thr Arg Ala Ile Cys Ser Arg Ser His Leu Met Gly Glu
185          820          825          830
187 Gly Glu Ala Met Leu Phe Gly Glu Tyr Ile Arg Leu Met Ala Leu Val
188          835          840          845
190 Glu Tyr Ser Ala Asp Glu Ile Arg Glu Val Phe Ser Asp Phe Pro Asp
191          850          855          860
193 Leu Glu Val Cys Val Tyr Ala Ala Pro Thr Gln Thr Val Ile Gly Gly
194 865          870          875          880
196 Pro Pro Glu Gln Val Asp Ala Ile Leu Ala Arg Ala Glu Ala Glu Gly
197          885          890          895
199 Lys Phe Ala Arg Lys Phe Ala Thr Lys Gly Ala Ser His Thr Ser Gln
200          900          905          910
202 Met Asp Pro Leu Leu Gly Glu Leu Thr Ala Glu Leu Gln Gly Ile Lys
203          915          920          925
205 Pro Thr Ser Pro Thr Cys Gly Ile Phe Ser Thr Val His Glu Gly Arg
206          930          935          940
208 Tyr Ile Lys Pro Gly Gly Glu Pro Ile His Asp Val Glu Tyr Trp Lys
209 945          950          955          960

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```

211 Lys Gly Leu Arg His Ser Val Tyr Phe Thr His Gly Ile Arg Asn Ala
212          965          970          975
214 Val Asp Ser Gly His Thr Thr Phe Leu Glu Leu Ala Pro Asn Pro Val
215          980          985          990
217 Ala Leu Met Gln Val Ala Leu Thr Thr Ala Asp Ala Gly Leu His Asp
218          995          1000          1005
220 Ala Gln Leu Ile Pro Thr Leu Ala Arg Lys Gln Asp Glu Val Ser Ser
221          1010          1015          1020
223 Met Val Ser Thr Met Ala Gln Leu Tyr Val Tyr Gly His Asp Leu Asp
224 1025          1030          1035          1040
226 Ile Arg Thr Leu Phe Ser Arg Ala Ser Gly Pro Gln Asp Tyr Ala Asn
227          1045          1050          1055
229 Ile Pro Pro Thr Arg Phe Lys Arg Lys Glu His Trp Leu Pro Ala His
230          1060          1065          1070
232 Phe Ser Gly Asp Gly Ser Thr Tyr Met Pro Gly Thr His Val Ala Leu
233          1075          1080          1085
235 Pro Asp Gly Arg His Val Trp Glu Tyr Ala Pro Arg Asp Gly Asn Val
236          1090          1095          1100
238 Asp Leu Ala Ala Leu Val Arg Ala Ala Ala Ala His Val Leu Pro Asp
239 1105          1110          1115          1120
241 Ala Gln Leu Thr Ala Ala Glu Gln Arg Ala Val Pro Gly Asp Gly Ala
242          1125          1130          1135
244 Arg Leu Val Thr Thr Met Thr Arg His Pro Gly Gly Ala Ser Val Gln
245          1140          1145          1150
247 Val His Ala Arg Ile Asp Glu Ser Phe Thr Leu Val Tyr Asp Ala Leu
248          1155          1160          1165
250 Val Ser Arg Ala Gly Ser Glu Ser Val Leu Pro Thr Ala Val Gly Ala
251          1170          1175          1180
253 Ala Thr Ala Ile Ala Val Ala Asp Gly Ala Pro Val Ala Pro Glu Thr
254 1185          1190          1195          1200
256 Pro Ala Glu Asp Ala Asp Ala Glu Thr Leu Ser Asp Ser Leu Thr Thr
257          1205          1210          1215
259 Arg Tyr Met Pro Ser Gly Met Thr Arg Trp Ser Pro Asp Ser Gly Glu
260          1220          1225          1230
262 Thr Ile Ala Glu Arg Leu Gly Leu Ile Val Gly Ser Ala Met Gly Tyr
263          1235          1240          1245
265 Glu Pro Glu Asp Leu Pro Trp Glu Val Pro Leu Ile Glu Leu Gly Leu
266          1250          1255          1260
268 Asp Ser Leu Met Ala Val Arg Ile Lys Asn Arg Val Glu Tyr Asp Phe
269 1265          1270          1275          1280
271 Asp Leu Pro Pro Ile Gln Leu Thr Ala Val Arg Asp Ala Asn Leu Tyr
272          1285          1290          1295
274 Asn Val Glu Lys Leu Ile Glu Tyr Ala Val Glu His Arg Asp Glu Val
275          1300          1305          1310
277 Gln Gln Leu His Glu His Gln Lys Thr Gln Thr Ala Glu Glu Ile Ala
278          1315          1320          1325
280 Arg Ala Gln Ala Glu Leu Leu His Gly Lys Val Gly Lys Thr Glu Pro
281          1330          1335          1340
283 Val Asp Ser Glu Ala Gly Val Ala Leu Pro Ser Pro Gln Asn Gly Glu

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284 1345          1350          1355          1360
286 Gln Pro Asn Pro Thr Gly Pro Ala Leu Asn Val Asp Val Pro Pro Arg
287          1365          1370          1375
289 Asp Ala Ala Glu Arg Val Thr Phe Ala Thr Trp Ala Ile Val Thr Gly
290          1380          1385          1390
293 Lys Ser Pro Gly Gly Ile Phe Asn Glu Leu Pro Arg Leu Asp Asp Glu
294          1395          1400          1405
296 Ala Ala Ala Lys Ile Ala Gln Arg Leu Ser Glu Arg Ala Glu Gly Pro
297 1410          1415          1420
299 Ile Thr Ala Glu Asp Val Leu Thr Ser Ser Asn Ile Glu Ala Leu Ala
300 1425          1430          1435          1440
302 Asp Lys Val Arg Thr Tyr Leu Glu Ala Gly Gln Ile Asp Gly Phe Val
303          1445          1450          1455
305 Arg Thr Leu Arg Ala Arg Pro Glu Ala Gly Gly Lys Val Pro Val Phe
306          1460          1465          1470
308 Val Phe His Pro Ala Gly Gly Ser Thr Val Val Tyr Glu Pro Leu Leu
309          1475          1480          1485
311 Gly Arg Leu Pro Ala Asp Thr Pro Met Tyr Gly Phe Glu Arg Val Glu
312 1490          1495          1500
314 Gly Ser Ile Glu Glu Arg Ala Gln Gln Tyr Val Pro Lys Leu Ile Glu
315 1505          1510          1515          1520
317 Met Gln Gly Asp Gly Pro Tyr Val Leu Val Gly Trp Ser Leu Gly Gly
318          1525          1530          1535
320 Val Leu Ala Tyr Ala Cys Ala Ile Gly Leu Arg Arg Leu Gly Lys Asp
321          1540          1545          1550
323 Val Arg Phe Val Gly Leu Ile Asp Ala Val Arg Ala Gly Glu Glu Ile
324          1555          1560          1565
326 Pro Gln Thr Lys Glu Glu Ile Arg Lys Arg Trp Asp Arg Tyr Ala Ala
327 1570          1575          1580
329 Phe Ala Glu Lys Thr Phe Asn Val Thr Ile Pro Ala Ile Pro Tyr Glu
330 1585          1590          1595          1600
332 Gln Leu Glu Glu Leu Asp Asp Glu Gly Gln Val Arg Phe Val Leu Asp
333          1605          1610          1615
335 Ala Val Ser Gln Ser Gly Val Gln Ile Pro Ala Gly Ile Ile Glu His
336          1620          1625          1630
338 Gln Arg Thr Ser Tyr Leu Asp Asn Arg Ala Ile Asp Thr Ala Gln Ile
339          1635          1640          1645
341 Gln Pro Tyr Asp Gly His Val Thr Leu Tyr Met Ala Asp Arg Tyr His
342 1650          1655          1660
344 Asp Asp Ala Ile Met Phe Glu Pro Arg Tyr Ala Val Arg Gln Pro Asp
345 1665          1670          1675          1680
347 Gly Gly Trp Gly Glu Tyr Val Ser Asp Leu Glu Val Val Pro Ile Gly
348          1685          1690          1695
350 Gly Glu His Ile Gln Ala Ile Asp Glu Pro Ile Ile Ala Lys Val Gly
351          1700          1705          1710
353 Glu His Met Ser Arg Ala Leu Gly Gln Ile Glu Ala Asp Arg Thr Ser
354          1715          1720          1725
356 Glu Val Gly Lys Gln
357 1730

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VERIFICATION SUMMARY

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L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date